

Product datasheet for **MR206814**

Ctu2 (NM_153775) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Myc-DDK
Symbol:	Ctu2
Synonyms:	2310061F22Rik; C16orf84; Ncs2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



ORF Nucleotide Sequence: >MR206814 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGTCTGGCAAGTGCTTGAGGGCCTGAGTCAGGATTCTGCGAAACGGCTACGCTTTGTGCCAGGAGTCA
 TCTATGTTGATGAGGGCGCAGCCTGTGGTCAGAGCTTGGAGGACAGACAGAAGACGGTGGCTGAGGTGAA
 GCGGATCCTGGAGAACACTGGTTTCCCATGGCATGTGGTTGCCTTAGAAGAGGTGTTTCAGCTTGCCCCCA
 TCAGTGCTATGTGCACTTCCCAGGAGTCAGCAGGGACAGAGGAGGCCACAAGGCTGCCGTGGACCGCT
 TCCTGCAGCAGCAGCAGCAGCAGCAGCAGCGTGTGCTGGGAGCTGAGGCCGGTGCCAGCCCAGCTCAGGG
 AGAGGCTCGGCTGCATCCATCCACGGCCGGGAACCCCTCAGGCACGGCCGGGTACCCACAGCTGCTCAG
 ACAGAGGCCTTGTCTAGGTTGTTTCAGTCCATAAAGACACTGACAGCCAAAGAGGAGCTTCTGCAGACCC
 TGAGGACCCATCTGATTGTGCACATAGCCCGAGTCCATGGCTATTGCAAGGTAATGACAGGGGAGACCTG
 CACCCCGCTGGCCATCAAGCTTATGACCAACCTGGCCCTGGGAGAGGCGCCTTCTCGCTGGGACACG
 GGCTTCTCAGATGAGCGACACGGGATGTGGTGTGGTGAGGCCATGCGGGACCACACGCTGAAGGAAG
 TGGCCTTCTACAACCACCTGTTTAGAGTCCCTCAGTCTTACACCAGCCATCGATACCAAGGCTCCAGA
 AAAGGCTAGCATCCACCGGCTGATGGAGGCCTTATCCTGAGGCTACAGACTCTGTTCCCGTCTACAGTC
 AGCACCGTGTACAGGACGAGTGAGAAGCTGGTCAAAGCTCCCGGGAGGGTTGTGCCGCTGGCCCGTCAG
 GCCCAGCTGCCTCCTGTGCATGTGTGCCCTGGACATTGACACTGCTGACAGTGCCACGGCCTTTGGGGC
 TCAGTCTCCTCACATCTCTCCAGATGCCGAGTGCTGAGGCTGGGATGCCTACCCAGCCCTGCTGTGCT
 GCAGGGGAGGGTCAGGCCAGAGCTGCCATAGGGAAGTTGGCAAGAGGGGGATGCACGGGCTGCATCA
 CAGAGCAGTTATGTTATAGCTGCCGAGTGAACATGAAGGACCTGCCCTCCTTGACCCATTGCCACCCTA
 CGTCTTGCTGAGGCTCAGCTCCGCAGCCAGAGGGGCTCGGTCTCTGAGGAAATCCAGGAGTATCTGATT
 ACAGATGAGGAGGAAGACAGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTAA

Protein Sequence: >MR206814 protein sequence
 Red=Cloning site Green=Tags(s)

MVWQVLEGLSQDSAKRLRFVPGVIYVDEGAACGQSLDRQKTVAEVKRILENTGFPWHVVALEEVFSLPP
 SVLCCTSQESAGTEEAYKAAVDRFLQQQQQQQRVLGAEAGASPAQGEARLHPSHGREPSGTAGYPTAAQ
 TEALSRLFSSIKTLTAKEELLQTLRTHLIVHIARVHGYCKVMTGETCTRLAIKLMTNLALGRGAFLAWDT
 GFSDERHGDVVLVRPMRDHTLKEVAFYNHLFRVPSVFTPAIDTKAPEKASIHRLMEAFILRLQTLFPSTV
 STVYRTSEKLVKAPREGCAAGPSGSPSCLLCMCALDIDTADSATAFGAQSSSHLSQMPSAEAGMPTQPCCA
 AGEGQAQSCHREVKGKRGDARACITEQLCYSCRVMKDLPSLDLPPYVLAEQLRSQRGSVSEEIQEYLI
 TDEEEDS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI

Cloning Scheme:



ACCN: NM_153775

ORF Size: 1281 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_153775.2](#)

RefSeq Size: 3066 bp

RefSeq ORF: 1545 bp

Locus ID: 66965

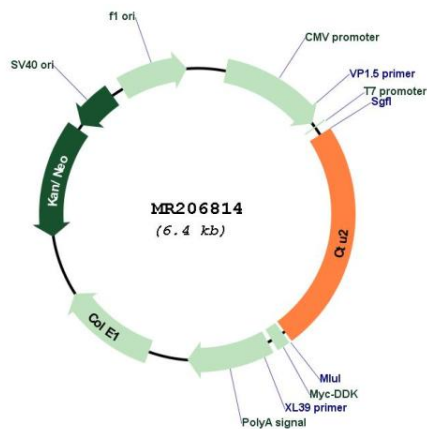
UniProt ID: [Q3U308](#)

Cytogenetics: 8 E1

MW: 46.6 kDa

Gene Summary: Plays a central role in 2-thiolation of mcm(5)S(2)U at tRNA wobble positions of tRNA(Lys), tRNA(Glu) and tRNA(Gln). May act by forming a heterodimer with CTU1/ATPBD3 that ligates sulfur from thiocarboxylated URM1 onto the uridine of tRNAs at wobble position. [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR206814